Matrix Switcher Solutions

"The capital expenditure is not the issue. It is one thing to purchase a matrix switcher; it is another thing to maintain it. We bought ours from American Dynamics and have no regrets. I'm very appreciative of the training classes. The quality of instruction and technical support have helped us immensely."

- Ron Ackerman

Security Consultant

Regina Airport Authority, Canada

Matrix Switchers

Our matrix switchers give you the basic building blocks for developing a video surveillance system tailored to the dimensions your situation dictates. Every one of our matrix switchers are full cross point, equipped with dome control and sophisticated alarm handling. You can program a variety of responses from one or multiple alarms to include any combination of salvos, presets, patterns, auxiliary actions, and more. The greatest strength of our matrix switchers besides proven reliability, lies with in their scalability, they start as small as 16 inputs by 4 outputs and grow your system to accommodate thousands of cameras and domes.

We also provide a complete selection of keyboards, from basic to the most feature-rich. Macros, multifunction keys, and smart cards make them easy to use. Whether you prefer a small footprint or a traditional industrial design, we have the right keyboard for you.

MegaPower LT

Created for busy environments like retail stores, hospitals, and schools, the MegaPower LT provides a complete video surveillance system at an affordable price. Small and versatile, it features advanced alarm handling capabilities usually reserved for larger systems as well as video loss detection on all channels. Ideal for sites that require retrofitting, the MegaPower LT is compact and fits just about anywhere - in racks or on walls, even under a desk. Choose from 16 and 32 input models with 4 or 8 outputs.

MegaPower 48 Plus

Scaled to small and mid-sized operations, the MegaPower 48 Plus incorporates features you would expect only in the largest of systems: video loss detection with programmable responses, wireless text messaging on alarm, a choice of keyboards, and more. With our recorder control devices, you can integrate DVRs and play, pause, stop, record, rewind, fast forward, and eject without ever leaving the console. This matrix switcher provides 48 inputs, which can be expanded to 288. Eight of its 16 video outputs include text overlay.

MegaPower 3200

The MegaPower 3200 is the ultimate modular, scalable video matrix switcher/controller system. This full-featured, pre-packaged system is designed for the largest and most sophisticated users of CCTV's such as airports, corporate or government complexes, casinos, and large medical centers. The system can start with a single CPU and switcher bay. It will support upgrades and enhancements, including more inputs and outputs, and is a bridge to the hybrid analog/digital future. The MegaPower 3200 expands upon the time-proven MegaPower 1024 matrix switcher technology, providing up to 3200 video inputs and 256 video outputs. The MegaPower 3200 supports up to 64 keyboards in the single CPU configuration and 128 keyboards in the dual CPU configuration. Hot switch capability no longer requires the accessory Hot Switch unit. New features include the re-designed EASY CPU configuration and monitoring software, activity logging, and snap shot. The MegaPower 3200 supports up to 30 satellite systems.

Matrix Switchers

MATRIX SWITCHERS COMPARISON TABLE			
	MegaPower LT	**MegaPower 48 Plus**	**MegaPower 3200**
Maximum System Size (video input x video output)	32 x 8	288 x 8 (192 x 12 or 144 x 16)	3200 x 256
Minimum System Size (video input x video output)	16 x 4	48 x 16 (8 with text)	16 x 4
Modular Design	No	No	Yes, (16 x 4)
Looping Inputs	Yes, Auto Termination	No	Yes, with ADULP
Maximum Keyboards/Users	8	244 (32 per unit)	128
Internal Video Loss Detection	Yes	Yes	Yes (AD2010DBVL)
CPU Hot Switch Option	No	No	Yes, inherent
Windows Setup Package	No	Yes	Yes
System Programming Back-up	Yes	Yes	Yes
Macro Control	Via ADCC1100 & AD2089	Via ADCC1100 & AD2089	Via ADCC1100 & AD2089
Multiple Languages	Yes	Yes	Yes
Multi-Site Control	Yes	Yes	Yes
Alarm Inputs	16 or 32	512 (16 via patch panel, 144 via domes, 48 via video loss and 512 via RS-232)	4,096 via AD2096, AD2083 or RS-232
Alarm Tables	1	10	10
Alarm Titles	Yes	Yes	Yes
Text Messaging on Alarm	No	Yes	Yes
On Screen Text	Yes	Yes	Yes
Preset Titles	No	4,096	No
Views/View Titles	Yes	No	No
Individual Monitor Tours	No	Yes	Yes
Universal Tours	16	64	64
Salvo Switching	No	64	64
System Partitioning	Yes	Yes	Yes
Priority Levels	8	8	8
User Passwords	No	64	64
Event Timers	No	35 (also includes alarm table)	35
Monitor Status Menu	No	Yes	No
Dome Protocol	SensorNet, AD RS-422, AD-UTC, and FSK	Manchester, SensorNet, and AD RS-422	Manchester, SensorNet, and AD RS-422
American Dynamics Data Line	No	No	Yes

Matrix Switchers

Merchants get the goods on shoplifting and internal theft with the MegaPower LT and 48 Plus, reducing shrinkage and increasing their bottom line.

MegaPower LT:

- Embedded menus support English, French, Spanish, German, and Italian
- 16 x 4 or 32 x 8 models
- Looping inputs, auto terminated
- SensorNet or American Dynamics UTC
- Control of RS-422 domes using the SensorNet to RS-422 converter
- DirectSet function for changing dome settings
- 128 views (camera/preset and camera/pattern)
- 16 sequences/tours
- ADnet (RS-485) and RS-232 communication protocols
- Keyboard generated (soft alarm) and RS-485 network events
- Up to eight keyboards with priority settings
- Password protection for menu entry
- Network up to three matrix systems on ADnet (RS-485) bus
- Dome ping test
- System partitioning
- Video loss detection on all channels
- 16 alarm inputs with 1 relay output (16 channel model) 32 alarm inputs with 2 relay outputs (32 channel model)
- Alarm titles
- Five alarm display modes
- Three alarm response modes
- Send alarm messages to other networked matrix systems
- 255 event messages
- Dimensions:
  90 x 445 x 185 mm (3.5 x 17.5 x 7.3 in)
- Weight: 3.5 kg (7.7 lbs)

MODEL NUMBERS

ADMPLT16	ADMPLT32
ADMPLT16C2 (with ControlCenter 200 Keyboard)	ADMPLT32C2 (with ControlCenter 200 Keyboard)
ADMPLT16C3 (with ControlCenter 300 Keyboard)	ADMPLT32C3 (with ControlCenter 300 Keyboard)

Matrix Switchers

MegaPower 48 Plus:

- 3 flexible expansion modes using a primary/secondary configuration of up to 7 systems and 288 cameras
- Ethernet Cat 5 IP connection for multi-matrix communications and system setup
- EASY 48 configuration and monitoring software for Windows based systems
- Dome ping test and status display
- Improved legacy RS-422 dome support, including simplex RS-422
- SensorNet/RS-232 command for DirectSet dome control menu with ControlCenter 200 and 300 series keyboards
- Modular microprocessor-based, high-density matrix
- 48 video inputs by 16 video outputs, 8 video outputs with text overlay
- Supports both NTSC and PAL video standards
- Slim, vertical wall-mount design; optional rack mount kit available
- Tool-free removability of main electronics unit (MEU) keeps system wiring intact
- Optional Unshielded Twisted Pair (UTP) adapter module allows installation with simple UTP cable for video
- Full embedded system menus for easy system setup
- Removable flash memory module for data backup without a PC
- User-defined macros
- Supports wireless text messaging on alarm for pagers and cellular phones
- 4096 preset titles, 250 alarm titles
- Dedicated alarm programming tables that differentiate between alarm sources
- Eight flexible RS-232 inputs, expandable to 32 (per system)
- 64 system tours and 64 salvos
- Dimensions:
  508 x 438 x 89 mm
  (20 x 17.3 x 3.5 in)
- Weight:
  Main Electronics Unit: 2.72 kg (6 lbs)
  Wall Bracket: 1.54 kg (3.4 lbs)
  Patch Panel Assembly: 1.72 kg (3.8 lbs)

MODEL NUMBERS

ADMP48-E

Accessory

VR48KIT

(Rack mount kit for MegaPower 48)

VRCMKIT

(Matrix cable management kit, rack or wall mountable, includes 3 brackets)

Matrix Switchers

Scalable and Flexible for a Future-Proof System

The MegaPower 3200 expands upon the time proven MegaPower 1024 matrix switcher, providing up to 3200 video inputs and 256 outputs.

MegaPower 3200:

- Single CPU with 16 RS-232 ports supporting up to 64 keyboards via American Dynamics port expanders
- Dual units connected together via cross over cables provide 32 RS-232 ports supporting up to 128 keyboards with American Dynamics port expanders
- Dual CPU mode provides redundant CPU backup protection with fault detection and hot-switch failover to ensure uninterrupted system operation
- Enhanced Administration SYstem (EASY) configuration and monitoring software tool to retrieve, archive, and load back MegaPower CPU data
- 10/100 Base-T Ethernet network connection for PC-based configuration, firmware updates, activity logging, snapshot, and email text messaging
- Activity logging and reporting of user control, alarms, and configuration changes to a network PC
- Single CPU systems with up to 128 video outputs and dual CPU systems of up to 256 video outputs
- Up to 3200 video inputs
- Satellite-connection of up to 30 systems provides full cross-point video matrix of up to 38,528 video inputs by 256 video outputs
- Automatic call-up of alarms defined by four time-controlled tables each with 4,096 entries for inputs or optional Internal video loss detection
- 128 alarm text messages can be defined with 25 alarm display/clearance modes, and 16 email messages
- LCD for CPU status and LED indicators for port activity
- Easy swap out of CPU modules without removing system cables
- Store snapshot of important scenes to network PC upon request
- Multilingual software supports English, French, Italian, German, Spanish, and Portuguese

Model Number Guide

BRAND	FAMILY	SYSTEM	INPUTS	REMOTE INPUTS	OUTPUTS	FORMATS
AD American Dynamics	MPR MegaPower	V {blank} = standard system V = factory install video loss detection	xxxx # of inputs, increments of 16, up to 3200 (i.e. 16, 32... 3200)	-- – = standard BNC inputs on VIM Back Panels S = all VIM4 & Remote Panels (30 inch cables) L = all VIM4 & Remote Panels (96 inch cables)	yyy # of outputs, increments of 4, up to 256 (i.e. 4, 8...256)	X N = 120 VAC (+ or - 10%), 50-60 Hz, UL & CSA P = 100-240 VAC, 50-60 Hz, CE

Matrix Switchers

MegaPower 3200 Accessories:

Central Processing Unit

- MegaPower CPU for MegaPower systems, 100-240 VAC . . . . . ADMPCPU
- RJ45 to screw terminal connector (quick-on connector for easy and clean installation) ADACQORJ45

Switcher Bays

- Matrix standard bay for MP3200 system, includes AD2010PS & AD2010DB, 120 VAC AD2010N
- Matrix bi-level bay for MP3200 system, includes AD2010PS & AD2010DB, 120 VAC AD2020N
- Matrix standard bay for MP3200 system, includes AD2010PS, AD2010PS-1 & AD2010DB, 100-240 VAC AD2010P
- Matrix bi-level bay for MP3200 system, includes AD2010PS, AD2010PS-1 & AD2010DB, 100-240 VAC AD2020P

Video Input

- Matrix input card for MP3200 systems (no back panel) AD2016PC
- Matrix input module for single level MP3200 systems, w/back panel AD2016AVIM-1*
- Matrix input module for level 1 of multi-level MP3200 systems, w/back panel AD2016AVIM-2
- Matrix input module for level 2 of multi-level MP3200 systems, w/back panel AD2016AVIM-3
- Matrix input module for additional multi-level MP3200 systems, w/back panel AD2016AVIM-4
- Matrix back panel for AD2016AVIM-1 for MP3200 systems (no input card) AD2016BP-1*
- Matrix back panel for AD2016AVIM-2 for MP3200 systems (no input card) AD2016BP-2
- Matrix back panel for AD2016AVIM-3 for MP3200 systems (no input card) AD2016BP-3
- Matrix back panel for AD2016AVIM-4 for MP3200 systems (no input card) AD2016BP-4

Video Output

- Matrix output module for 960 input MP3200 system, w/single-width back panel AD2024BVOM-1*
- Matrix output module for 1920 input MP3200 system, w/double-width back panel AD2024BVOM-3
- Matrix output module for 3200 input MP3200 system, w/double-width back panel AD2024BVOM-4
- Matrix back panel for AD2024BVOM-1, for MP3200 systems (no output card) AD2024BP-1*
- Matrix back panel for AD2024BVOM-3, for MP3200 systems (no output card) AD2024BP-3
- Matrix back panel for AD2024BVOM-4, for MP3200 systems (no output card) AD2024BP-4
- Matrix output card for AD2024BVOM, for MP3200 systems (no back panel) AD2024BPC

Data Buffers

- Matrix data receiver/buffer module for MP3200 systems AD2010DB
- Matrix video loss detector module for 256 inputs for MP3200 (upgrade kit) AD2010DBVLKIT

Power Supply

- Matrix power supply module for MP3200 systems, 120 VAC AD2010PS
- Matrix power supply module for MP3200 systems, 100-240 VAC AD2010PS-1*

Looping Panel Accessories

- Matrix cable, 76 cm (30 in), for looping between AD168 & MP3200 system levels AD2016CB
- Matrix cable, 244 cm (96 in), for looping between AD168 & MP3200 system levels AD2016CB8
- Matrix universal looping panel . . . . . ADULP
- Matrix universal looping panel, two 76 cm (30 in) coaxial ribbon cables ADULP-30
- Matrix universal looping panel, two 244 cm (96 in) coaxial ribbon cables ADULP-96
- Matrix terminator cap for AD2016AVIM-3, AD2016AVIM-4, & AD168VIM-4 (16 inputs) AD2016TERM

Upgrade Kits

- Matrix upgrade for 8 input cards, AD2016PC/VIM-x, for more than 1024 inputs AD2016FWKIT
- Matrix upgrade for 2 DBVL cards, AD2010DBVL, for more than 1024 inputs AD2010VLFWKIT
- Expansion labels for VOM-1 systems greater than 128 outputs ADVOM-1LABEL
- Expansion labels for VOM-3 systems greater than 1024 input x 128 outputs ADVOM-3LABEL
- Expansion labels for VOM-4 systems greater than 1024 input x 128 outputs ADVOM-4LABEL

** In this case, 1 does not signify PAL.*

ADTTE Touch Tracker + AD2089:

ADTTE Touch Tracker Keyboard

- Variable-speed tracker ball control of pan/tilt
- Camera, monitor, and satellite site selection
- Preset, pattern, and auxiliary control
- Tour and salvo control
- Alarm control
- Dimensions:
  130 x 194 x 260 mm
  (5.12 x 7.63 x 10.24 in)
- Weight: 1 kg (2.2 lbs)

AD2089 System Keyboard

- Variable-speed, vector-solving, twist-to-zoom joystick for pan/tilt/zoom control
- Camera, monitor, recorder, and satellite site selection
- 1000 user-defined macros
- Preset, pattern, and auxiliary control
- Tour and salvo control
- Dimensions:
  76.2 x 419 x 133 mm
  (3 x 16.5 x 5.25 in)
- Weight: 2.5 kg (5.5 lbs)

MODEL NUMBERS

ADTTE

AD2089

AD2089-1

AD2089R

AD2089R-1

Matrix Keyboards

ADCC0200 series

ADCC0300 series

Double Duty

You can use ControlCenter 200 & 300 Keyboards with our MegaPower Matrix Switcher/ Controller systems. Get all of the basic functions at an affordable price plus the versatility to control all system activities from one keyboard.

ControlCenter 200 + ControlCenter 300:

- Choice of models with variable-speed and vector solving joysticks
- Selectable keyboard protocols, RS-232 or ADnet (RS-485) for control of various matrix switching systems
- LCD with adjustable contrast
- Tactile, color-coded elastomeric keys
- Preset, pattern, and auxiliary control
- Lens, alarm, tour, and salvo control
- New DirectSet dome function control
- Passcode protection for programming functions
- Direct control of RS-232 devices via remappable keys (ADnet – RS-485 Mode)
- MegaPower 3200, 48, 168, and 1024 control (RS-232 Mode)
- ControlCenter 200 allows no programming access – “operate only” (RS-232 Mode)
- Dimensions:
  80 x 340 x 132 mm
  (3.1 x 13 x 5.2 in)
- Weight: 1.5 kg (3.3 lbs)

MODEL NUMBERS

ADCC0200
No power supply

ADCC0200P
Includes power supply

ADCC0300
No power supply

ADCC0300P
Includes power supply

Remote Kits
ADCCACPSP

MegaPower ControlCenter 1100:

- Lean and sophisticated design with adjustable tilt feet
- Smart card access provides three levels of user access: operator, supervisor, and administrator
- 64 customizable macro keys with 8 keys per named macro family group
- 1000 user-defined macros stored on smart cards
- Large back-lit LCD with brightness control
- Camera view, camera control, and monitor partitioning via the smart card
- User ID options via the smart card
- Integrated smart card programmer/reader
- Soft-key driven menu options
- Variable-speed, vector-solving, twist-to-zoom joystick for pan/tilt/zoom control
- Camera, monitor, recorder, and satellite site selection
- Preset, pattern, and auxiliary control
- Lens control keys
- Alarm management
- Remappable iris and focus keys allow one-handed camera control
- Tour and salvo control
- Rack mount kit included
- Dimensions:
  451 x 203 x 73 mm
  (17.8 x 8 x 2.9 in)
- Weight: 2.4 kg (5.3 lbs)

MODEL NUMBERS

ADCC1100

Accessories

MP1000SC3
(Smart card 3-pack)

MP1000SCA
(Spare administrator card)

MP-PSU
(Power supply unit)

MP-CBL
(Cable)

MP-KMI
(External interconnect module)

Matrix System Accessories

Matrix System Accessories

Protocol Devices

- Matrix code generator, 1 HighSpeed Data input to 64 Manchester outputs, 120 VAC AD2091
- Matrix code generator, 1 HighSpeed Data input to 64 Manchester outputs, 230 VAC AD2091-1
- Matrix code distributor, 1 HighSpeed Data or Manchester to 16 RS-422, 120 VAC AD2083-02C
- Matrix code distributor, 1 HighSpeed Data or Manchester to 16 RS-422, 230 VAC AD2083-02C-1
- Matrix code distributor upgrade kit AD2083 -02 to -02C AD2083-02CKIT
- SensorNet /Manchester Distribution Panel, no power supply . . . . . ADACSNETD
- SensorNet Distribution Panel, w/power supply. . . . . ADACSNETDP
- RS-422 Distribution Panel, no power supply. ADAC4222D
- RS-422 Distribution Panel, w/power supply. ADAC4222DP
- Matrix code converter, SensorNet to RS-422, 120 VAC RCSN422
- Matrix port expander, expands 1 RS-232 port to 4 RS-232 ports, 120 VAC. AD2081
- Matrix port expander, expands 1 RS-232 port to 4 RS-232 ports, 230 VAC. AD2081-1

Auxiliary Follower Devices

- Matrix switcher/follower, provides 32 relays to follow video switching, 120 VAC AD2031
- Matrix switcher/follower, provides 32 relays to follow video switching, 230 VAC AD2031-1
- Matrix auxiliary follower, provides 32 relays to follow aux outputs, 120 VAC AD2033
- Matrix auxiliary follower, provides 32 relays to follow aux outputs, 230 VAC AD2033-1

Alarm Devices

- Matrix alarm interface unit, provides 64 alarm inputs, 120 VAC AD2096A
- Matrix alarm interface unit, provides 64 alarm inputs, 230 VAC AD2096-1
- Matrix alarm responder, provides 32 relays to follow alarm monitor, 120 VAC AD2032
- Matrix alarm responder, provides 32 relays to follow alarm monitor, 230 VAC AD2032-1

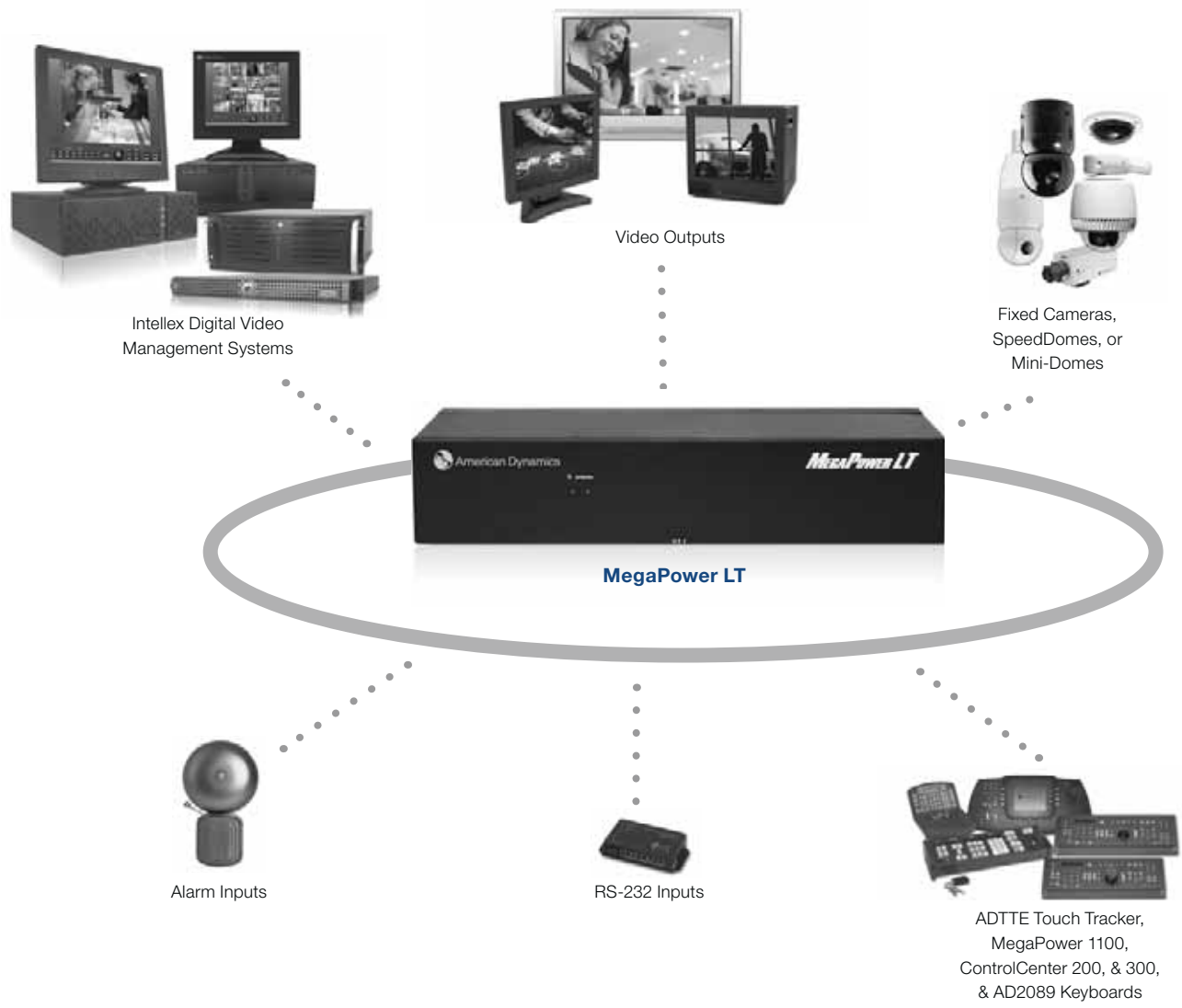
Power Supply

- Additional power supply120/230 VAC for ADAC1100, ADMPLT16/32, ADMP48-E or ADMPCPU . . . . . MP-PSU

There are few places where security is more crucial than a prison. Matrix switchers from American Dynamics give corrections officials time-tested technology they can rely on to keep everything under lock and key.

MegaPower LT

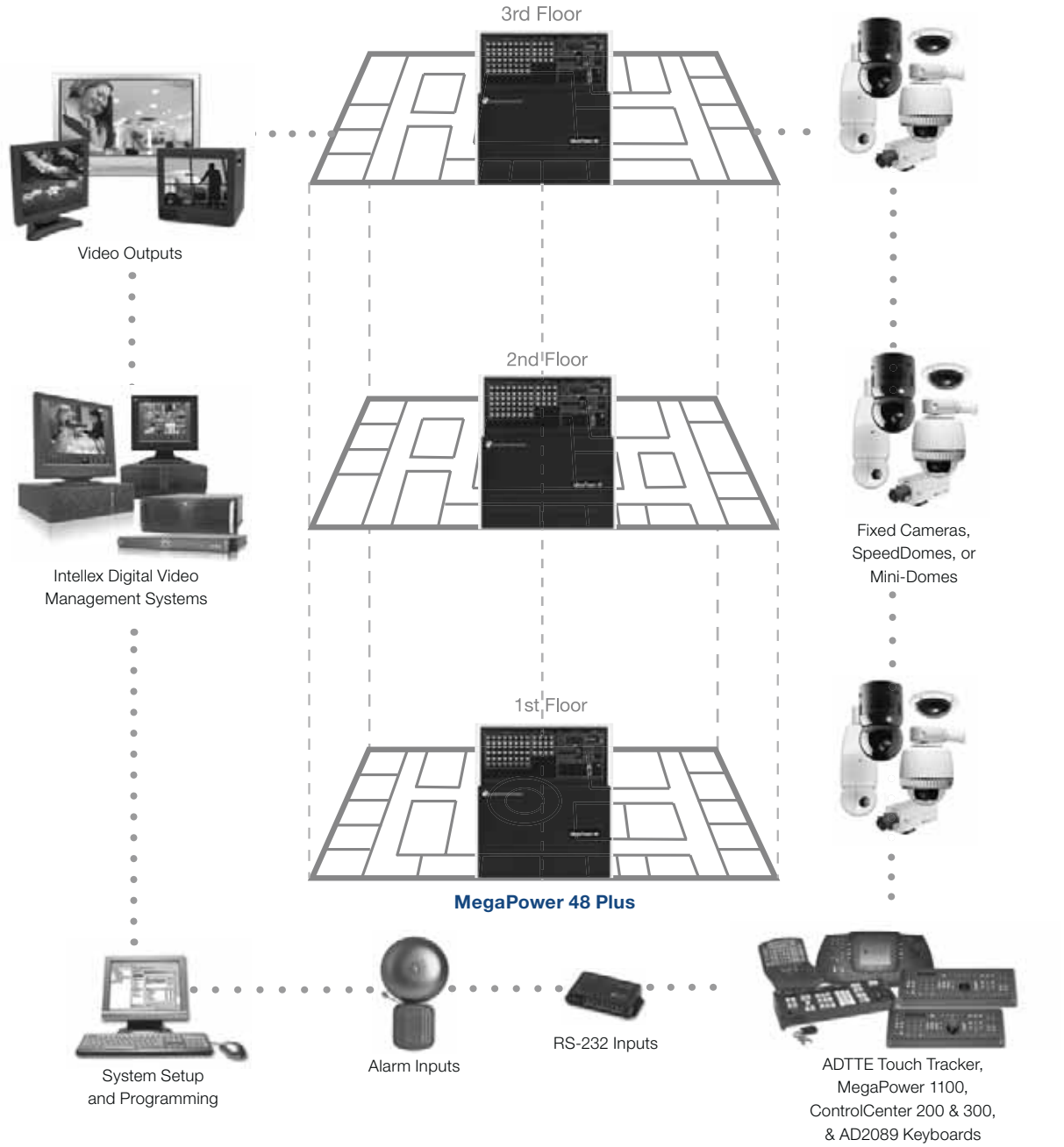
SYSTEM DIAGRAM



Integrate up to three MegaPower LT units and control everything from any keyboard on the network. By forming a distributed system, you can view and control cameras installed at different points throughout your property as well as receive and acknowledge any alarm events that they generate.

MegaPower 48 Plus

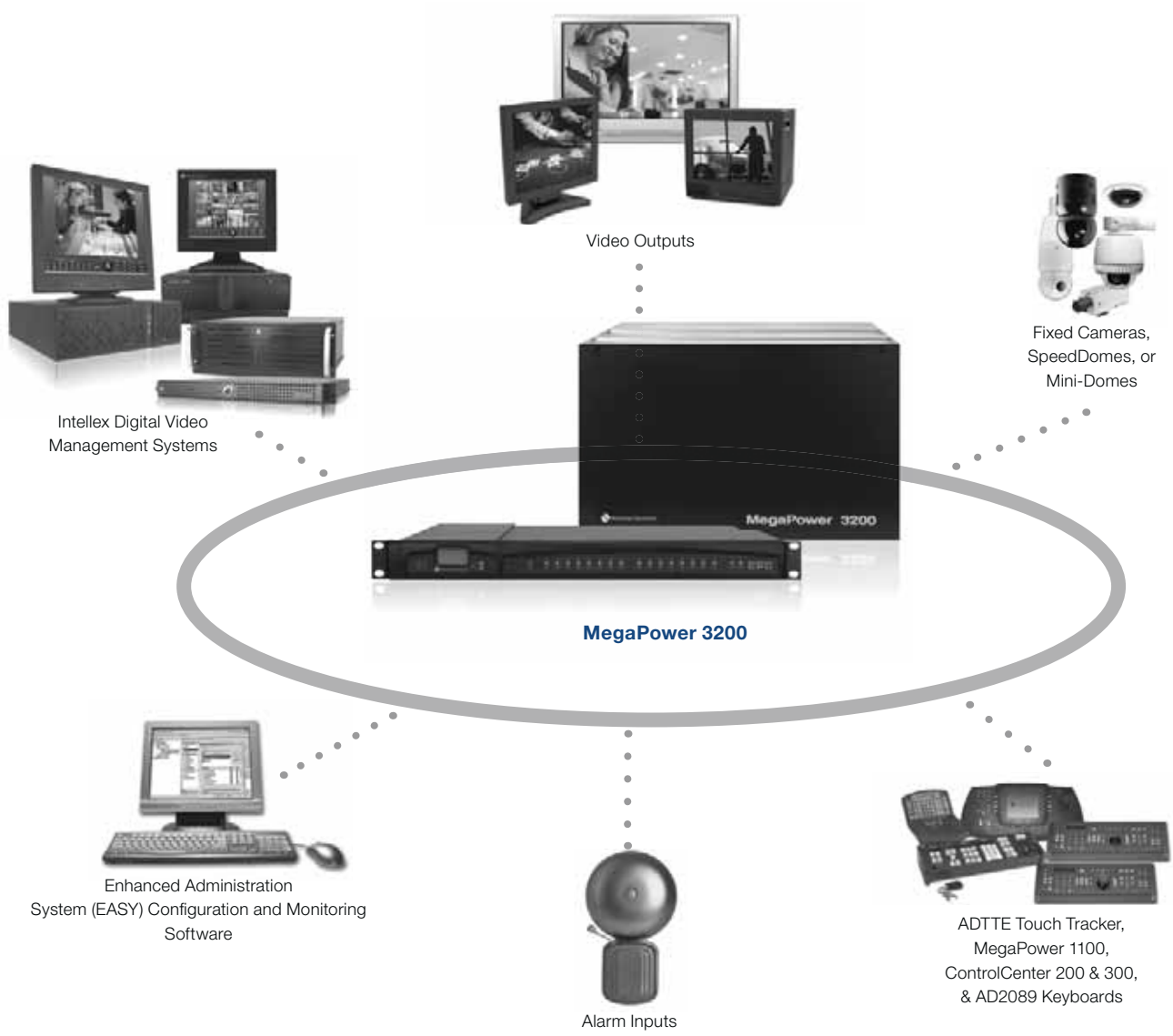
SYSTEM DIAGRAM



Choose from one of three expansion modes that increase your system's capacity by up to 288 cameras and 8 monitors using 8, 12, or 16 video trunks. The MegaPower 48 Plus can function either as a standalone unit or as part of a network, making it the perfect choice for anyone who needs flexibility for future growth.

MegaPower 3200

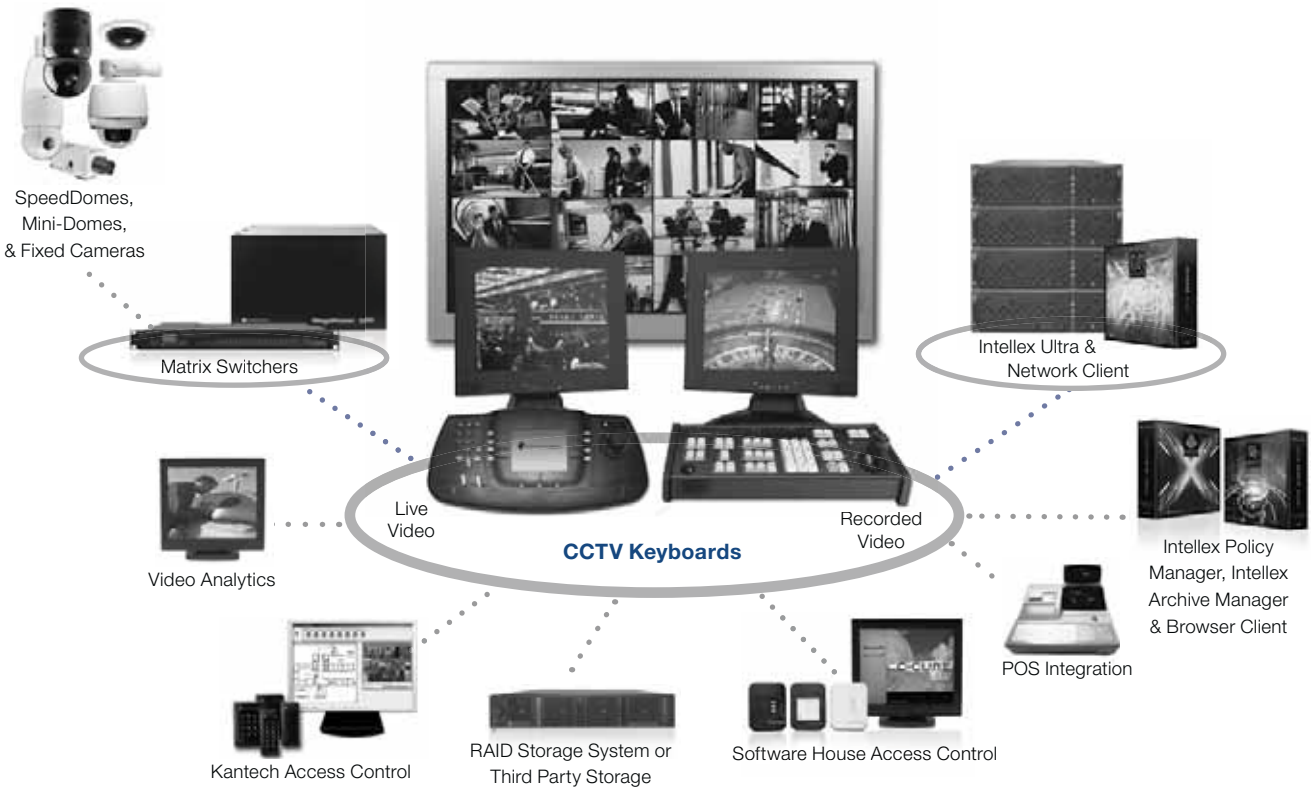
SYSTEM DIAGRAM


Video Outputs
Intellex Digital Video Management Systems
Fixed Cameras, SpeedDomes, or Mini-Domes
MegaPower 3200
MegaPower 3200
Enhanced Administration System (EASY) Configuration and Monitoring Software
Alarm Inputs
ADTTE Touch Tracker, MegaPower 1100, ControlCenter 200 & 300, & AD2089 Keyboards

The MegaPower 3200 matrix switcher supports up to 3200 video inputs, 256 video outputs, 128 keyboards, 4096 alarms, and 30 satellite systems. The MP3200 provides Intellex DVR control using the AD2089 keyboard and Network Client software, and hot switch capabilities using a second MPCPU unit with no hot switch accessory unit required. The EASY CPU configuration and monitoring software allows remote configuration and monitoring.

Integrated Switcher Solution

SYSTEM DIAGRAM



Matrix Switcher Integration

Situation: A large casino currently uses analog hardware for their surveillance system, such as matrix switchers, keyboards, and monitors.

Challenge: The casino wants to add the ability to play back recorded video on analog monitors and control cameras via a matrix keyboard without having to retrain the operator (no PC keyboard or mouse).

Solution: Add a PC running Network Client and use a serial connection for the AD2089 keyboard – a powerful, easy to use solution that's transparent to the operator.

Virtual Matrix

Situation: A business has multiple mid-sized facilities around the country with cameras monitoring areas like parking lots, visitor entrance ways, and loading docks.

Challenge: The security administrator wants to be able to simultaneously display as many cameras from remote locations as possible. However, because each location only needs to monitor a few areas, installing a matrix switcher at each location is not a cost-effective option.

Solution: Network Client displays up to 64 cameras with four monitors using the customers existing network infrastructure on which the Intellex digital video management systems are installed. A single mouse-click or stroke of the keyboard will manage the "wall of monitors" via Network Client.